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Description of a central Amazonian and Guianan tree frog, genus *Osteocephalus* (Anura, Hylidae), with oophagous tadpoles

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A new species of the hylid frog genus *Osteocephalus* is described from Manaus, Amazonas, Brazil. It is a medium-sized species that resembles *O. taurinus*, but is smaller and has shorter hind legs. In contrast to other species of *Osteocephalus*, the dorsal skin is barely sexually dimorphic and the male's vocal sac is single, median and subgular. The tadpole is peculiar for living in phytotelmes, feeding on conspecific eggs and having a labial tooth row formula of 2(2)/3.

Most species of the neotropical hylid frog genus *Osteocephalus* Steindachner, 1862 are identifiable by the presence of well-ossified skulls, the presence of paired lateral vocal sacs, and rugose or warty dorsal skin in males and relatively smooth skin in females. TRUEB & DUELLMAN (1971) reviewed and defined the genus and recognized five species: *O. buckleyi* (Boulenger, 1882), *O. lepriurii* (Duméril & Bibron, 1841), *O. pearsoni* (Gaige, 1929), *O. taurinus* Steindachner, 1862 and *O. verruciger* (Werner, 1901) (*verrucigerus* auct.). DUELLMAN (1974) followed COPE (1867) in placing *Hyla langsdorffii* Duméril & Bibron, 1841 in the genus. Topotypes of *Hyla elkejungingerae* Henle, 1981 were identified as *O. verruciger* by DUELLMAN (in litt. to W. BÖHME, pers. comm.) but placed into the synonymy of *O. taurinus* by HOOGMOED (in FROST 1985) and regarded as a distinct species, *O. elkejungingerae*, by HENLE (1992). MARTINS & CARDOSO (1987) described *O. subtilis* from Acre, Brazil, and DUELLMAN & HOOGMOED (1992) placed *Hyla rodriguezi* Rivero, 1968 in *Osteocephalus*. AYARZAGÜENA et al. (1992a) described five species, *O. aecii*, *O. edelcae*, *O. galani*, *O. luteolabris* and *O. rimarum* from Venezuelan table mountains and placed them in the *O. rodriguezi* group. AYARZAGÜENA et al. (1992b) transferred this group to a



new genus, *Tepuihyla*. Thus, between 7 and 14 described species are currently comprised in the genus.

An additional species from midwestern Amazonia is in the process of being described by M. MARTINS and M. GORDO (pers. comm.). One more species from central Amazonia and two Guyanese states has been known for much more than a decade and has appeared in the literature many times as *Osteocephalus* sp. (HOOGMOED, 1979; ZIMMERMAN, 1983; ZIMMERMAN & BOGART, 1984; MARTINS & CARDOSO, 1987; HERO, 1990; HÖDL, 1990, 1993; ZIMMERMAN & RODRIGUES, 1990; HOOGMOED & AVILA-PIRES, 1991; DUELLMAN & HOOGMOED, 1992; WEYGOLDT & JUNGFER, 1993) or erroneously as *Osteocephalus buckleyi* (ZIMMERMAN & BOGART, 1988). In the course of our independent work on the reproductive biology and tadpole morphology of this species, we felt that the taxonomic status of the frog needed to be resolved. Therefore we describe it here as

***Osteocephalus oophagus* sp. nov.**

Holotype. – MZUSP 69852, an adult male, collected by K.-H. JUNGFER on 9 April 1993 at Reserva Florestal Adolfo Ducke (2°55'S, 59°59'W), situated at km 26 of the Rodovia AM-010 (Manaus-Itacoatiara), Estado do Amazonas, Brazil.

Paratypes. – NMW 32925.1-2, collected by W. HÖDL on 28 February 1978; MPEG 4845-4846, collected by M. J. HENZL, L. S. FORD and A. LIMA on 9 February 1992; AMNH A.136183-136184, collected by M. J. HENZL and L. S. FORD on 3 March 1992; MZUSP 69853, INPA 01446 and 01448, SMNS 10801-10802, ZFMK 57137-57138, all collected by K.-H. JUNGFER between January and April 1993; all from Reserva Florestal Adolfo Ducke. For sexes and Museum abbreviations see Table I.

Definition. – For purposes of comparisons, we follow TRUEB & DUELLMAN's (1971) standards. A medium sized species of *Osteocephalus* (maximum known snout-vent length (SVL) 47.2 mm in males, 62.7 mm in females). Dorsal skin in males with a few non-spinous tubercles or smooth, in females smooth. Skin on flanks smooth, slightly shagreened posterior to the insertion of the arm in some specimens. Webbing on hand moderate, up to first third of antepenultimate phalanx on inner edge of third finger. Dorsum brown to grey with or without irregular tan flecks, spots, mottling or reticulation, with white spots in some specimens. Venter white; in some specimens very light brown reticulation present on the chest. Lips brown or grey, with or without a cream subocular spot extending to the edge of the tympanum. Flanks brown or grey. White mottling or reticulation on posterior half of the flanks; many white spots on dark ground present in some specimens.

Diagnosis. – *Osteocephalus oophagus* is distinguished from the frogs of the *O. rodriguezii* group by substantial webbing on the hand (absent or rudimentary in the *O. rodriguezii* group), and from *O. buckleyi* by the lack of a conspicuous row of tubercles on the tarsus and prominent supraorbital tubercles. *O. verruciger* and *O. elkejungingerae* are larger and the dorsum of males is covered by many spinous tubercles. *O. leprieuarii* has less webbing on the hands (web reaching base of antepenultimate phalanx on inner side of third finger) and in some cases transverse lines or bars on the dorsum that are absent in *O. oophagus*. *O. langsdorffii* is larger and has scalloped dermal folds on the outer edges of hands and

feet that are lacking in *O. oophagus*. The new species is distinguished from *O. pearsoni* by the lack of brown reticulation on the venter (present only in chest area, if at all, in *O. oophagus*) and more webbing on the hands (to base of antepenultimate phalanx on inner side of third finger in *O. pearsoni*). *O. subtilis* has a black iris (golden with black rays in *O. oophagus*) and a glandular line above the vent (absent in *O. oophagus*). An additional undescribed species from midwestern Amazonia bears a conspicuous, complete white line running around the whole of the upper lip (faint and interrupted in *O. oophagus*), and its supratympanic fold is smooth (tubercular in *O. oophagus*) (M. MARTINS, pers. comm.). *O. oophagus* is most easily confused with *O. taurinus*, with which it shares the golden iris with radiating black lines. *O. taurinus* is a larger frog that reaches 104 mm. The dorsum in males is covered by many spinous tubercles with keratinized tips. The webbing on the hands is slightly more extensive than in *O. oophagus*, reaching the middle of the antepenultimate phalanx on the inner side of the third finger. The legs are longer than in *O. oophagus*. When stretched forward and angled at 90° at the tibiotarsal articulation, the tarsus reaches the tip of the snout in *O. oophagus* and extends beyond that point in *O. taurinus*. Furthermore, adults of *O. taurinus* possess two elevated longitudinal bony ridges (frontoparietal flanges) in the interorbital area, that are not visible in *O. oophagus*, but may be felt in large specimens when rubbing with the fingertips.

Description of holotype. — Measurements and proportions (following DUELLMAN, 1970) are given in Tables I and II. A male of 43.8 mm SVL (fig. 1a). Body wider than the head. Diameter of the tympanum slightly wider than half the eye diameter. Head flat between orbits, slightly concave in the intercanthal region and truncate in lateral and dorsal aspect. Nostrils elevated, internarial region slightly depressed. Canthus rostralis slightly rounded, loreal region concave, bearing a few rounded warts below the canthus. An elevated dermal fold ascending posterior to the mid level of the eye to the area above the tympanum and sloping to the insertion of the arm. Tympanum distinct and rounded. A weak axillary membrane extending to less than one fifth the length of the humerus. A row of flat, barely raised warts visible on the ventrolateral edge of the forearm, extending onto the proximal half of the fourth finger. Fingers with moderately large discs, that of the third finger about four fifths the diameter of the tympanum. Enlarged prepollex bearing an elliptical tubercle. Nuptial pads absent (dark brown before), as the frog was no more in breeding condition when preserved on 28 July 1993. Distal subpalmar tubercle bifid on finger IV. Webbing basal between finger I and II and with a webbing formula (SAVAGE & HEYER, 1967; MYERS & DUELLMAN, 1982) of III₁,5-3⁻III₂,5-2⁺IV in the others. Relative finger lengths of adpressed fingers 3 > 4 > 2 > 1 (fig. 2a). Legs relatively short. Tarsus reaching the tip of the snout when stretched forward parallel to the body axis and bent at 90° at the tibiotarsal articulation. Inner metatarsal tubercle large, flat and elliptical. No outer metatarsal tubercle. Toe webbing formula II⁺-2⁻III⁺-2III¹⁺-2IV²-1⁺V. Relative toe lengths 4 > 5 > 3 > 2 > 1 (fig. 2b). Vent opening positioned posteriorly at the upper level of the thighs.

Dorsally, skin weakly granular with low tubercles in the inter- and postorbital region and few on the anterior part of the dorsum. Dorsal aspects of the arms weakly granular and those of the legs smooth. Laterally, skin tubercular posteroventral to the tympanum, shagreened on the anterior half of the flanks and smooth on the posterior half, tubercular

Table I. - Measurements of type specimens of *Osteocephalus oophagus*. Measurements in mm: ED, eye diameter; FL, foot length; HL, head length; HW, head width; SVL, snout-vent length; TL, tibia length; TD, tympanum diameter. Museum abbreviations: AMNH, American Museum of Natural History, New York; INPA, Instituto Nacional de Pesquisas da Amazônia, Manaus; MPEG, Museu Paraense Emílio Goeldi, Belém; MZUSP, Museu de Zoologia, Universidade de São Paulo; NMW, Naturhistorisches Museum Wien; SMNS, Staatliches Museum für Naturkunde, Stuttgart; ZFMK, Zoologisches Forschungsinstitut und Museum Alexander Koenig, Bonn.

	SVL	HL	HW	ED	TD	TL	FL
Males							
SMNS 10802	35.7	12.2	10.7	3.90	2.16	19.5	13.8
MPEG 4846	41.6	14.5	13.7	4.80	3.12	23.5	17.5
INPA 1448	42.3	14.2	13.1	5.10	2.82	22.8	15.8
AMNH 136184	42.5	15.2	13.8	5.10	2.86	24.2	17.8
NMW 32925.2	43.2	14.6	13.9	4.86	2.82	22.7	17.0
ZFMK 57138	43.3	15.5	14.5	5.22	3.24	24.3	17.9
MZUSP 69852	43.8	14.7	13.0	4.56	2.52	23.3	17.2
SMNS 10801	47.2	16.6	14.6	6.00	3.66	23.5	18.3
Females							
AMNH 136183	46.2	16.0	13.7	5.34	3.20	23.8	18.1
ZFMK 57137	49.8	17.2	16.9	5.34	3.48	27.7	20.3
MPEG 4845	53.2	18.2	16.9	5.52	3.96	29.5	22.5
MZUSP 69853	53.6	17.9	16.7	5.82	3.90	30.8	21.2
NMW 32925.1	54.6	18.9	16.5	5.46	4.32	31.2	22.0
INPA 1446	55.6	17.7	16.8	5.10	3.72	29.5	21.6

Table II. - Proportions of male and female *Osteocephalus oophagus*. Abbreviations: see Table I.

Locality, sex	n		HL / SVL	HW / SVL	TD / ED	TL / SVL	FL / SVL
Reserva Ducke, males	8	min.	0.336	0.297	0.553	0.498	0.374
		max.	0.358	0.335	0.650	0.569	0.421
		mean	0.346	0.316	0.585	0.542	0.399
Reserva Ducke, females	6	min.	0.318	0.297	0.599	0.515	0.388
		max.	0.346	0.339	0.791	0.575	0.423
		mean	0.339	0.312	0.693	0.551	0.402
Rio Urucu, females	2	min.	0.348	0.297	0.735	0.557	0.403
		max.	0.357	0.301	0.835	0.574	0.418
		mean	0.353	0.299	0.785	0.566	0.411

below the vent. Skin on the belly and the posteroventral thigh surfaces granular, the other ventral surfaces smooth. Tongue round. Prevomers angular, with 8 and 10 prevomerine teeth. Vocal slits extending postero-laterally from the middle of the tongue. Vocal sac subgular, median and weakly distensible during call.

Colour in alcohol. — Dorsal surfaces brown with tan flecks and blotches. Flanks light brown with brown mottling on the posterior half. Upper and lower lips bordered by faint creamy stripes often interrupted by tan spots. Venter creamy with some faint light brown mottling on the chest. Throat creamy white with light brown mottling. Ventral surfaces of the arms creamy with a brown hue, those of the legs pale light brown. Posterior thigh surfaces brown. Bones green and visible through the skin. Iris yellowish white with many radiant black stripes and a horizontal black bar on each side of the pupil.

Colour in life. — Depending on illumination and colour of the substrate the frog was sitting on, the dorsal colour varied from light brown with indistinct darker flecks and blotches to dark brown with almost black flecks and blotches. Flanks were brown to creamy brown with darker brown-mottling on the posterior half. Ventral surfaces were white. Bones were green and the iris golden yellow with radiant black stripes and horizontal black bars.

Variation. — The largest male of the type series has an SVL of 47.2 mm, the largest female of 55.6 mm. Thirty marked and released males from the type locality bearing nuptial pads ranged from 35.9 to 45.5 mm, and seventeen ovigerous females from 49.8 to 60.6 mm. One female (INPA 01442) from the Rio Urucu is 62.7 mm. There is little variation in proportions between the sexes, except that the tympana of females are slightly larger than those of males (Table II). The dorsal skin varies from smooth to weakly granular, bearing none or a few raised tubercles. There is a tendency of males to bear a few more tubercles on head and dorsum than females, but some males have both surfaces smooth, while some females have a few tubercles on the head and sometimes on the dorsum. This variation is found in the preserved material at hand, and was also obvious in the many live frogs we saw. Dorsal tuberculation is not a reliable sexual dimorphic character. Breeding males bear horny dark brown nuptial pads on the prepollices.

A lot of variation was observed in coloration. In preservative, the dorsal colour ranges from grey to dark brown with or without darker blotches or flecks (figs. 1a-b). Also, the amount of cream spots or mottling dorsally, laterally and around the vent is variable (figs. 1c-d). The ventral brown mottling on chest and throat may be lacking or reduced to the area under the lower jaw.

Habitat. — Reserva Florestal Adolfo Ducke, a reserve managed by the Instituto Nacional de Pesquisas da Amazônia (INPA), consists of hilly terra firme lowland forest at an altitude of about 50 m. Frogs usually migrate at night on vertical stems of young trees and bushes normally less than 2 cm in diameter at heights of 0.5 to 2 m. Males call from near or inside phytotelmes.

Reproductive biology. — Pairs of *O. oophagus* deposit their eggs in phytotelmes, such as epiphytic or ground bromeliads, Buriti Palm (*Mauritia flexuosa*) leaf axils, water-filled palm bracts lying on the ground or tree holes up to heights of about 35 m. Females return to the deposition sites regularly in intervals of about five days, usually clasped by the same

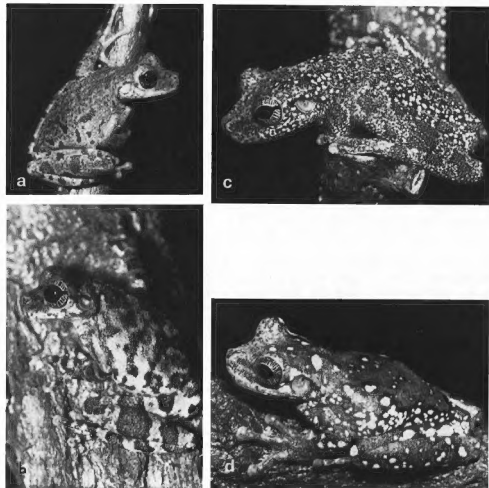


Fig. 1. — *Osteocephalus oophagus* sp. nov. Specimens from the type locality. (a) Holotype MZUSP 69852, adult male. (b) Male showing numerous tan dorsal blotches. (c) Subadult female with numerous small white spots. (d) Adult female showing extreme extent of lateral and dorsal white spots.

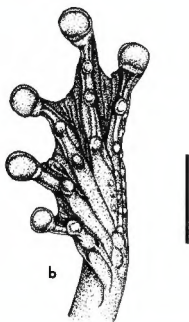
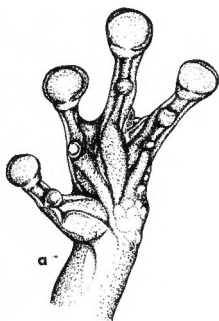


Fig. 2. — Hand (a) and foot (b) of a male *Osteocephalus oophagus* (paratype INPA 01448). Line equals 5 mm.

males. If there are larvae already present, they consume the newly laid eggs. The eggs not eaten hatch. The larvae starve if the mother fails to return and if they are not provided with trophic eggs (WEYGOLDT & JUNGFER, 1993). A detailed study on the reproductive biology is in progress.

Calls. – The advertisement call usually consists of one to six croaking notes emitted at night and occasionally during the day (type A). At night it is very often followed by one to four (usually two) distinctly different notes that sound like “ka ká” (type B).

Type A of frogs from the INPA-WWF MCSEP reserves and from Parque Nacional Tapajós were described in detail by ZIMMERMAN & BOGART (1984), who recorded an emphasized frequency of 1.62 ± 0.65 kHz, low frequency range of 0.89 ± 0.33 kHz, high frequency range of 2.84 ± 0.42 kHz, and call duration per note of 0.24 ± 0.07 s. ZIMMERMAN & BOGART (1988) again described calls and calling of this frog, under the name of *Osteocephalus buckleyi*. They noted the high intraspecific variability and other characteristics of the call.

Description of the tadpole. – Tadpoles were collected by L. C. SCHIESARI on 5 March 1993 in water-filled plastic basins used as egg-laying sites by *O. oophagus* near the Igarapé Acará, Reserva Florestal Adolfo Ducke, and preserved in 10 % formalin. Two tadpoles were raised until metamorphosis. Measurements were taken with the optical measuring unit Wild MMS 235. Drawings (figs. 3-4) were made with a camera lucida attached to a stereomicroscope. Measurements were made according to GRILLITSCH et al. (1993). Developmental stages were determined following GOSNER (1960). Labial tooth row formula (LTRF) is after ALTIG (1970). The following description is based on 10 tadpoles ranging from stage 35 to stage 38. Measurements of larvae are given in Table III.

Tadpole of ORTON's (1953) type IV. Body slightly depressed, ovoid in dorsal view. Snout nearly truncate from above and, in profile, acutely rounded. Eyes positioned dorsolaterally; interorbital distance 1.5-1.7 times the internarial distance, which in turn equals width of oral disc. Nares rimmed, rounded, and directed anterolaterally. Their distance to the eyes about half of their distance to tip of the snout. Spiracular tube sinistral, ventrolateral, and directed posterodorsally. Spiracular opening slightly posterior to mid length of body, to which it is tightly attached. Dorsal and ventral margin of caudal musculature parallel in proximal third, then gradually narrowing and almost reaching tip of the tail. Ventral fin slightly lower than dorsal one, fairly paralleling ventral margin of caudal musculature. Dorsal fin extending a short distance onto body. Oral disc anteroventral and not emarginate. One row of moderately sized marginal papillae with a medial gap in upper labium which may be visible in dorsal view. Submarginal papillae in some specimens in one discontinuous row in lower labium as well as scattered in ventrolateral portion of oral disc. Two rows of denticles on the upper labium, the second one showing a distinct median gap, and three rows on the lower one (LTRF 2(2)/3). Upper jaw sheath arched, lower one V-shaped, both black and without serrations (magnification 50 ×). Colour of measured tadpoles chestnut brown dorsally; venter and caudal musculature lighter.

Ontogenetic change. – Newly metamorphosed frogs 12-13 mm in SVL and completely different in colour from the adults. Dorsal and lateral surfaces grey except for a black canthal stripe continuing as a supratympanic stripe posterior to eye to insertion of the arm. Dorsal surfaces of upper arm and proximal half of lower arm white. An orange spot on

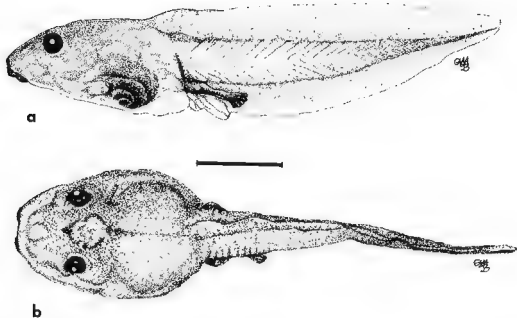


Fig 3 - Dorsal (a) and lateral (b) view of a tadpole of *Osteocephalus oophagus* in stage 36 (GOSNER, 1960) of typical proportions. Line equals 5 mm.

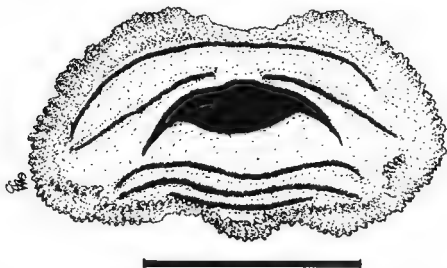


Fig 4. - Oral disc of a tadpole of *Osteocephalus oophagus* (same individual as in fig. 3). Line equals 1.4 mm.

Table III. - Measurements of larvae of *Osteocephalus oophagus* (mean values, ranges in parentheses) Measurements in mm: DT, maximum height of tail; LF, maximum height of lower (ventral) tail fin; SVL, snout-vent length; TL, total length; UF, maximum height of upper (dorsal) tail fin; VT, tail length.

Stage	n	TL	SVL	VT	DT	UF	LF
19	1	4.66					
20	4	4.73 (4.35-5.03)					
23	5	5.98 (5.70-6.48)					
27	1	16.7	7.2	9.5	3.71	1.20	1.19
28	1	19.5	8.6	10.9	4.68	1.61	1.50
30	1	21.3	9.1	12.2	4.97	1.60	1.62
31	1	24.2	10.2	14.0	5.21	1.61	1.58
33	2	26.2 (25.4-27.0)	11.7 (11.6-11.8)	14.5 (13.8-15.2)	6.02 (5.93-6.10)	1.98 (1.86-2.10)	1.76 (1.76-1.76)
34	2	23.7 (22.5-24.9)	10.8 (10.1-11.4)	12.9 (12.4-13.5)	5.83 (5.31-6.34)	1.74 (1.59-1.89)	1.81 (1.73-1.88)
35	5	27.0 (25.0-28.2)	12.5 (10.0-13.3)	14.5 (12.8-16.0)	6.14 (5.84-6.44)	1.99 (1.90-2.14)	1.84 (1.66-2.02)
36	1	28.9	14.2	14.7	6.49	2.08	1.75
37	1	27.8	12.9	14.9	6.55	2.08	1.98
38	3	29.5 (26.4-31.6)	13.9 (13.6-14.5)	15.5 (11.9-17.8)	6.44 (6.44-6.44)	2.06 (1.98-2.13)	1.94 (1.88-1.99)
39	3	30.0 (28.4-31.4)	13.8 (13.4-14.3)	16.2 (15.0-17.6)	6.96 (6.27-7.85)	2.07 (1.84-2.35)	1.91 (1.60-2.16)
40	2	34.6 (32.9-36.2)	15.1 (15.0-15.1)	19.5 (17.8-21.2)	6.78 (6.65-6.90)	1.96 (1.57-2.35)	1.99 (1.95-2.04)

elbow, distal dorsal surface of lower arm and proximal dorsal surface of fourth finger. A large white spot, capped by a smaller orange one, on heel. Another orange spot on knee and in some specimens on outer edge of the metatarsus. Finger- and toe-discs orange. Iris bright red without radiating black stripes. With this colour pattern, they are virtually indistinguishable from sympatric *O. taurinus* (juveniles described as *O. taurinus* by DUELLMAN & LESCURE, 1973, are most likely those of *Hyla geographica*).

A specimen of 21 mm SVL already had the typical adult pattern, except that the white spot on the upper arm and proximal lower arm was still present. The finger- and toe-discs, as well as the iris, already with black rays and horizontal bars, had an orange hue.

Distribution. - Apart from the Reserva Ducke, about 25 km north of Manaus, we have heard the distinctive call of this species in the forest of the Universidade do Amazonas campus within the city of Manaus and in Reserva Florestal Walter Egler, about 50 km north-northeast of Manaus. The frog is well known from the INPA-WWF Minimal Critical Size of Ecosystems Project (MCSEP) reserves, approximately 80 km northeast of Manaus (ZIMMERMAN, 1983; ZIMMERMAN & BOGART, 1984, 1988, ZIMMERMAN & RODRIGUES, 1990). HOOGMOED (1979) listed it from "eastern Guiana" and HOOGMOED & AVILA-PIRES (1991) recorded it from Petit Saut, French Guyana, and remarked that it was also known from Suriname and Brazil. Those records are all in the Guianan biogeographical region (see HOOGMOED, 1979 for a delimitation). We have not found or heard the species just south of the Amazon in the forests along the Manaus-Humaitá road, but M MARTINS and M. GORDO (pers. comm.) found specimens at the Rio Urucu about 100 km

SSE of Coari. It has also been recorded from the Parque Nacional do Tapajós near Itaituba, southwest of Santarém, Pará (ZIMMERMAN & BOGART, 1984).

Discussion. — The new species possesses a number of characters new or unusual for the genus. In their definition, TRUEB & DUELLMAN (1971) (slightly altered by DUELLMAN & HOOGMOED, 1992) found *Osteocephalus* to have "vocal sacs paired, posterior, and when inflated protruding posteroventral or posterolateral to angles of jaws". *Osteocephalus oophagus* has a single median subgular vocal sac, a character shared with some frogs of the *O. rodriguezi* group (sensu AYARZAGÜENA et al., 1992a) (AYARZAGÜENA et al., 1992b). Also, it is similar to some frogs of that group in that the dorsal skin structure is not a reliable sexually dimorphic character (AYARZAGÜENA et al., 1992a). Although males tend to be slightly more granular, there are smooth skinned males both alive and especially in preservative.

Tadpoles have two upper and three lower tooth rows like most lentic hylid larvae. In other species of *Osteocephalus*, however, there are 2-3 upper and 5-8 lower tooth rows (HENLE, 1981; HERO, 1990). The reduction of denticle rows in *O. oophagus* may be an adaptation for oophagy as a special case of macrophagy. The tadpoles do not need to rasp their food as grazers. This might also be the reason for the absence of beak serrations. The reduction of denticle rows is known for many other arboreal tadpoles (LANNOO et al., 1987) and does not oppose its inclusion in the genus *Osteocephalus*.

Despite the differences mentioned above, *O. oophagus* shares important characters with *O. taurinus*: the juvenile colorations and the colour of the iris in adults are identical. The frontoparietal flanges are present, though less conspicuous in *O. oophagus*. For these reasons the new species may be most closely related to *O. taurinus*.

Derivatio nominis. — The specific name *oophagus* is a compound of the Greek *oon* (egg) and *phagein* (to eat) and refers to the larval habit of eating conspecific eggs.

RESUMEN

Osteocephalus oophagus sp. nov. de Reserva Ducke, Manaus, Amazonas, Brasil, especie medigrande del género, es semejante a *O. taurinus* pero más pequeña y con las piernas posteriores más cortas. En contraste a otros *Osteocephalus*, la piel dorsal no muestra dimorfismo sexual y el saco vocal del macho es impar, mediano y subgular. El renacuajo es atípico para este género, porque vive en fitotelmata, alimentándose de huevos coespecíficos y teniendo una fórmula de denticulos labiales de 2(2)/3. La especie es conocida de las bajas Guianas y de la baja Amazonia.

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